Biographical Sketch: Scott Dodelson

Education and Training

Columbia College and School of Engineering, Joint BA/BS Applied Physics 1983 Columbia University, Physics, PhD, 1988

Research and Professional Experience

2017-present	Professor and Head, Department of Physics, Carnegie Mellon University
2004 – 2017	Professor, Department of Astronomy and Astrophysics, The University of Chicago
2011 – 2017	Distinguished Scientist, Fermilab
2004 – 2011	Scientist II, Fermilab
2006 – 2008	Acting Director, Fermi Center for Particle Astrophysics
2004 – 2005	Visiting Professor, Northwestern University
2001 - 2006	Head, Theoretical Astrophysics Group, Fermilab
1999-2004	Associate Professor, Department of Astronomy and Astrophysics, The University of Chicago
1999-2004	Scientist I, Fermilab
1994 – 1999	Associate Scientist, Fermilab
1988 – 1991	Research Associate, Harvard University
1991 - 1994	Research Associate, Fermi National Accelerator Laboratory, Theoretical Astrophysics

Selected Publications

- 1. DES Collaboration, "Dark Energy Survey Year 1 Results: Cosmological Constraints from Galaxy Clustering and Weak Lensing," arXiv: 1708.01530.
- 2. S. Dodelson, "Gravitational Lensing", Cambridge University Press (2017).
- 3. E. Krause et al., "Dark Energy Survey Year 1 Results: Multi-Probe Methodology and Simulated Likelihood Analyses," arXiv: 1706.09359.
- 4. S. Passaglia et al., "Cross-correlating 2D and 3D galaxy surveys," **Phys. Rev. D95** 123508 (2017).
- 5. Y. Park et al., "Joint analysis of galaxy-galaxy lensing and galaxy clustering: Methodology and forecasts for Dark Energy Survey," **Phys. Rev. D94**, 063533 (2016).
- 6. E.J. Baxter et al., "A Measurement of Gravitational Lensing of the Cosmic Microwave Background by Galaxy Clusters Using Data from the South Pole Telescope," **Astrophys. J.** 806, 247 (2015).
- 7. J. Zuntz et al., "CosmoSIS: Modular Cosmological Parameter Estimation," **Astron. Comput.** 12, 45 (2015).
- 8. S. Dodelson, "How much can we learn about the physics of inflation?" **Phys. Rev. Lett.** 112, 191301 (2014).
- 9. P. Zhang, et al., "Probing Gravity at Cosmological Scales by Measurements which Test the Relationship between Gravitational Lensing and Matter Overdensity," **Phys. Rev. Lett.** 99, 141302 (2007).
- 10. S. Dodelson and M. Liguori, "Can Cosmic Structure form without Dark Matter?," Phys. Rev. Lett. 97, 231301 (2006).
- 11. S. Dodelson, "Modern Cosmology," Elsevier (2003).

Synergistic Activities

2016—present: Co-Chair, DES Science Committee 2016—present: Treasurer, Aspen Center for Physics 2012-2017: Co-Convener, LSST DESC Software and Infrastructure Working Group

2015-2017: Chair, DOE-HEP Cosmic Visions: Dark Energy

2014-present: Member, Scientific Organizing Committee, every CMB-S4 meeting

2013-14: Member, Particle Physics Project Prioritization Panel (P5)

2013-2015: Science Advisory Council, Fermilab

2013-17: Secretary-Treasurer, Division of Astrophysics, American Physical Society

2012: DOE HEP Dark Energy Science Plan Task Force

2012: Hans Bethe Award Committee, APS

2012-13: Co-convener, "Dark Energy and the CMB," sub-group, Snowmass Community Study

2011-2017: Co-lead, Inflation MA, Physics Frontier Center

2011-16: Co-convener, DES Theory and Combined Probes Working Group

2008-2017: Editor, Physics Letters B

2006-present: Member, Aspen Center for Physics

2004-08: Managing Editor, International Journal for Physics D

2004-06: Divisional Editor, Physical Review D

2003-2012: Editor, Journal of Astroparticle Physics

Ph.D.Advisor: Ph.D Thesis Advisor: Gerald Feinberg (Columbia)

Postdoctoral Advisors: Tai Tsun Wu (Harvard), Rocky Kolb and Michael Turner (Fermilab)

Graduate Student and Selected Postdoctoral Advisees

Kim Coble (Graduate Student): Faculty, San Francisco State University

Ryan Scranton (Graduate Student): google

Eduardo Rozo (Graduate Student): Faculty, Arizona

Fabian Schmidt (Graduate Student): Faculty, Munich

Melanie Simet (Graduate Student): Postdoc, UC Irvine

Eric Baxter (Graduate Student): Postdoc, Penn

Youngsoo Park (Graduate Student): Postdoc, Arizona

Alessandro Manzotti (Graduate Student): Postdoc, Paris

Stephane Colombi (Postdoc): Faculty, IAP

Lam Hui (Postdoc): Faculty, Columbia

Ewan Stewart (Postdoc): Faculty, KAIST

Nicole Bell (Postdoc): Faculty, Melbourne

Kev Abazajian (Postdoc): Faculty, UC Irvine

Pengjie Zhang (Postdoc): Faculty, Shanghai

Kenji Kadota (Postdoc): Faculty, Nagoya

Hee-Jong Seo (Postdoc): Faculty, Ohio

Elise Jennings (Postdoc): Faculty, Argonne

Chihway Chang (Postdoc): Postdoc, Chicago